

Title (en)
DISPLAY DEVICE

Title (de)
ANZEIGEVORRICHTUNG

Title (fr)
DISPOSITIF D'AFFICHAGE

Publication
EP 2180528 A4 20120201 (EN)

Application
EP 08827986 A 20080813

Priority
• JP 2008064526 W 20080813
• JP 2007215018 A 20070821

Abstract (en)
[origin: EP2180528A1] Dynamic range is widened in a display device with a photosensor that can read an image due to having a photodetection element inside a pixel thereof. A sensor driving circuit switches ON a reset signal (RST) that is supplied via reset signal bus line, and after a predetermined time has elapsed, switches ON a readout signal (RWS) that is supplied via readout signal bus line. Thus, in the photosensor, from which a photosensor signal is output in accordance with an amount of light received by the photosensor in the predetermined time, the capacitance of a capacitor provided in the photosensor is made variable from when the reset signal (RST) is supplied to the photosensor until when the predetermined time has elapsed.

IPC 8 full level
H01L 31/10 (2006.01); **G01J 1/42** (2006.01); **G02F 1/133** (2006.01); **G06F 3/041** (2006.01); **G06F 3/042** (2006.01); **G09G 3/20** (2006.01); **G09G 3/36** (2006.01); **H04N 5/335** (2011.01); **H04N 5/355** (2011.01); **H04N 5/369** (2011.01)

CPC (source: EP US)
G02F 1/13338 (2013.01 - EP US); **G06F 3/0412** (2013.01 - EP US); **G06F 3/042** (2013.01 - EP US); **H04N 25/59** (2023.01 - EP US); **H04N 25/77** (2023.01 - EP); **G01J 1/46** (2013.01 - EP US); **G02F 2201/58** (2013.01 - EP US); **H10K 59/13** (2023.02 - EP US)

Citation (search report)
• [Y] WO 9966560 A1 19991223 - FOVEON INC [US]
• [Y] US 2005212916 A1 20050929 - NAKAMURA TAKASHI [JP], et al
• [Y] US 2006231875 A1 20061019 - PATRICK INNA [US], et al
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Citation (examination)
• CHRIS BROWN ET AL: "A 2.6 inch VGA LCD with Optical Input Function using a 1-Transistor Active-Pixel Sensor", 2007 IEEE INTERNATIONAL SOLID-STATE CIRCUITS CONFERENCE. DIGEST OF TECHNICAL PAPERS, 1 February 2007 (2007-02-01), pages 132 - 592, XP055099591, ISSN: 0193-6530, ISBN: 978-1-42-440853-5, DOI: 10.1109/ISSCC.2007.373623
• See also references of WO 2009025223A1

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Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MT NL NO PL PT RO SE SI SK TR

DOCDB simple family (publication)
EP 2180528 A1 20100428; EP 2180528 A4 20120201; CN 101779299 A 20100714; CN 101779299 B 20110727; JP 5068320 B2 20121107; JP WO2009025223 A1 20101125; US 2011175871 A1 20110721; US 8350835 B2 20130108; WO 2009025223 A1 20090226

DOCDB simple family (application)
EP 08827986 A 20080813; CN 200880102342 A 20080813; JP 2008064526 W 20080813; JP 2009529013 A 20080813; US 67435908 A 20080813